

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

SPECTRUM DYNAMICS MEDICAL
LIMITED,

Plaintiff,

v.

GENERAL ELECTRIC COMPANY, GE
HEALTHCARE, INC., GE MEDICAL
SYSTEMS ISRAEL LTD., JEAN-PAUL
BOUHNİK, SERGIO STEINFELD, ARIE
ESCHO, NATHAN HERMONY, and YARON
HEFETZ,

Defendants.

Case No.: 18-cv-11386 (VSB)

JURY TRIAL DEMANDED

REDACTED

**REPLY AND COUNTERCLAIMS TO THE ANSWER, AFFIRMATIVE DEFENSES,
AND AMENDED COUNTERCLAIMS OF DEFENDANTS GENERAL ELECTRIC
COMPANY, GE HEALTHCARE, INC., GE MEDICAL SYSTEMS ISRAEL LTD.,
JEAN-PAUL BOUHNİK, SERGIO STEINFELD, ARIE ESCHO, AND NATHAN
HERMONY TO PLAINTIFF SPECTRUM DYNAMICS MEDICAL LIMITED'S
FIRST AMENDED COMPLAINT**

Plaintiff Spectrum Dynamics Medical Limited (hereinafter "Plaintiff" or "Spectrum"), by and through its attorneys, files this Reply and Counterclaims to the Answer, Affirmative Defenses and Amended Counterclaims filed July 22, 2020 [D.I. 89] ("GE Amended Counterclaims") by Defendants General Electric Company, GE Healthcare, Inc., and GE Medical Systems Israel Ltd. (collectively "GE" or "GE Defendants"), Jean-Paul Bouhnik ("Bouhnik"), Sergio Steinfeld ("Steinfeld"), Arie Escho ("Escho"), and Nathan Hermony ("Hermony")¹ (each a "Defendant" and collectively "Defendants") and hereby alleges as follows:

PARTIES

1. Plaintiff Spectrum is without sufficient knowledge or information to admit or

¹ The Court dismissed Defendant Hefetz from suit for lack of personal jurisdiction in the Court's June 2, 2020 Order. [D.I. 73].

deny the allegations in Paragraph 1 of the GE Amended Counterclaims, and accordingly denies the same.

2. Admitted.

JURISDICTION AND VENUE

3. Admitted.

4. Admitted.

5. Admitted.

6. Admitted.

7. Admitted.

PATENTS IN SUIT

8. Admitted that U.S. Patent No. 9,295,439 (“the ‘439 Patent”) is entitled “Weight Compensation of Radiation Detectors,” that the face of the ‘439 patent indicates that the patent issued on March 29, 2016, and that a copy thereof is purportedly attached to the GE Amended Counterclaims as Exhibit A. Plaintiff Spectrum otherwise denies that the ‘439 patent was lawfully issued, and to the extent that any further allegations in Paragraph 8 of the GE Amended Counterclaims require a response, denied.

9. Paragraph 9 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains a factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information to admit or deny the allegations in Paragraph 9 of the GE Amended Counterclaims, and accordingly, denies the same. Plaintiff Spectrum further responds that Mr. Hefetz is the sole named inventor of the ‘439 patent, and the assignment references other agreements between Defendant GE and Mr. Hefetz, which Plaintiff Spectrum has requested and Defendant GE has refused to provide (Ex. C hereto, July 17 and 21, 2020 email exchange between Spectrum’s and Defendants’ counsel), such that upon

information and belief, Plaintiff Spectrum alleges that Mr. Hefetz retains an interest in the '439 patent and is receiving remuneration or benefits from the assertion thereof against Spectrum.

10. Admitted that the purported invention of the '439 patent is defined by the claims thereof, which were wholly, or in-part, invented, at least, by Spectrum employees Yoel Zilberstien and Nathaniel Roth. Paragraph 10 of the Amended GE Counterclaims otherwise contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information to admit or deny such allegation, and accordingly, denies the same.

11. Admitted that U.S. Patent No. 9,402,595 ("the '595 Patent") is entitled "System and Method for Positioning Detector Heads," that the face of the '595 patent indicates that the patent issued on August 2, 2016, and that a copy thereof is purportedly attached to the GE Amended Counterclaims as Exhibit B. Plaintiff Spectrum otherwise denies that the '595 patent was lawfully issued, and to the extent that any further allegations in Paragraph 11 of the GE Amended Counterclaims require a response, denied.

12. Paragraph 12 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains a factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information to admit or deny the allegations in Paragraph 12 of the GE Amended Counterclaims, and accordingly, denies the same. Plaintiff Spectrum further responds that Mr. Hefetz is a named inventor of the '595 patent, and the assignment references other agreements between Defendant GE and Mr. Hefetz, which Plaintiff Spectrum has requested and Defendant GE has refused to provide (Ex. C hereto, July 17 and 21, 2020 email exchange between Spectrum's and Defendants' counsel), such

that upon information and belief, Plaintiff Spectrum alleges that Mr. Hefetz retains an interest in the '595 patent and is receiving remuneration or benefits from the assertion thereof against Spectrum.

13. Admitted that the purported invention of the '595 patent is defined by the claims thereof, which were wholly, or in-part, invented, at least, by Spectrum employees Yoel Zilberstien and Nathaniel Roth. Paragraph 13 of the Amended GE Counterclaims otherwise contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information to admit or deny such allegation, and accordingly, denies the same.

FACTUAL ALLEGATIONS

14. Admitted that Plaintiff Spectrum has made, used, offered to sell, and/or sold within the United States, and/or imported into the United States, its Veriton® and Veriton-CT® systems (collectively the "Spectrum Veriton®"). Spectrum is without sufficient knowledge or information as to the origin of the pictures in Paragraph 14 of the GE Amended Counterclaims that Defendant GE alleges reflect a Veriton® and Veriton-CT® to admit or deny this assertion, and accordingly, denies the same.

15. Admitted.

16. Admitted that Plaintiff Spectrum filed a Complaint on December 6, 2018, and a First Amended Complaint [D.I. 37]² on May 1, 2019 alleging, *inter alia*, breach of contract, trade secret misappropriation, correction of inventorship under 35 U.S.C. § 256 and other claims against Defendants General Electric Company, GE Healthcare, Inc., and GE Medical Systems Israel Ltd., Jean-Paul Bouhnik, Sergio Steinfeld, Arie Escho, Nathan Hermony, and Yaron Hefetz based upon these Defendants' filing and prosecution of patent

² The redacted version of the First Amended Complaint is [D.I. 38].

applications (which disclose and/or claim Spectrum Trade Secrets A-Q), as well as development of the GE Imitation Device; otherwise, the allegations in Paragraph 16 of the GE Amended Counterclaims are denied.

17. Admitted.

18. Admitted that in 2009 GE was considering acquiring Spectrum *en toto* or the Spectrum SPECT nuclear molecular imaging business and technologies, that Spectrum sought enhanced protections of the Spectrum Information culminating in the 2009 Agreement, and that GE accordingly sought more detailed information and materials from Spectrum than previously provided under earlier non-disclosure agreements, including full disclosure of Spectrum's new 360° SPECT gantry system with [REDACTED] [REDACTED] for full-body multi-organ scanning technology, which ultimately culminated in the Spectrum Veriton®, as well as in virtually every aspect of Spectrum's business; otherwise, the allegations in Paragraph 18 of the GE Amended Counterclaims are denied.

19. Paragraph 19 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains a factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information to admit or deny the allegations in Paragraph 19 of the GE Amended Counterclaims, and accordingly, denies the same.

20. Paragraph 20 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, admitted that Spectrum knew of the '439 patent and '595 patent as of December 6, 2018; otherwise denied.

21. Paragraph 21 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, admitted that Spectrum's

analysis of the ‘439 patent and ‘595 patent – with the hindsight of learning of the GE Imitation Device – revealed GE’s misappropriation and theft of certain Spectrum Trade Secrets as set out in the First Amended Complaint [D.I. 37]; otherwise denied.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 9,295,439

22. Plaintiff Spectrum incorporates by reference the responses to Defendant GE’s assertions set forth in Paragraphs 1–21 above.

23. Paragraph 23 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the ‘439 patent; otherwise denied.

24. Paragraph 24 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, denied.

25. Paragraph 25 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “column,” “attach,” “gantry,” and “detector arms” as attributed by GE without context or explanation, as well as the origin of the video in Paragraph 25 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in operation to admit or deny any such allegation, and accordingly, denies the same.

26. Paragraph 26 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms

“movable section,” “radiation detector,” “disposed,” and “detector arms” as attributed by GE without context or explanation, as well as the origin of the video in Paragraph 26 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in operation to admit or deny any such allegation, and accordingly, denies the same.

27. Paragraph 27 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “weight compensation unit,” “positioned within the gantry,” “movable section,” and “radiation detector” as attributed by GE without context or explanation, and accordingly, denies the same.

28. Paragraph 28 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “counter balance weight,” “movable section,” and “gantry” as attributed by GE without context or explanation, and accordingly, denies the same.

29. Paragraph 29 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, denied.

30. Paragraph 30 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the term “gantry” as attributed by GE without context or explanation, and accordingly, denies the same.

31. Paragraph 31 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “extending from,” “column,” “gantry,” and “movable radiation detector” as attributed by GE without context or explanation, and accordingly, denies the same.

32. Paragraph 32 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “counter balanced weight,” “radiation detector,” and “gantry” as attributed by GE without context or explanation, and accordingly, denies the same.

33. Paragraph 33 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the term “performs a method of forming a camera system” as attributed by GE without context or explanation, and accordingly, denies the same.

34. Paragraph 34 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “attaches,” “column,” “gantry,” “movable section,” and “radiation detector” as attributed by GE without context or explanation, and accordingly, denies the same.

35. Paragraph 35 of the Amended GE Counterclaims contains only legal

argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “weight compensation unit,” “movable section,” “radiation detector,” and “gantry” as attributed by GE without context or explanation, and accordingly, denies the same.

36. Paragraph 36 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, admitted that Spectrum’s analysis of the ‘439 patent – with the hindsight of learning of the GE Imitation Device – revealed GE’s misappropriation and theft of certain Spectrum Trade Secrets as set out in the First Amended Complaint [D.I. 37]; otherwise denied.

37. Paragraph 37 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the ‘439 patent; otherwise denied.

38. Paragraph 38 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the ‘439 patent; otherwise denied.

39. Paragraph 39 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the ‘439 patent; otherwise denied.

40. Paragraph 40 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this

paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '439 patent; otherwise denied.

41. Paragraph 41 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '439 patent; otherwise denied.

42. Paragraph 42 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '439 patent; otherwise denied.

43. Plaintiff Spectrum is without sufficient knowledge or information to admit or deny the allegations in Paragraph 43 of the GE Amended Counterclaims, and accordingly denies the same. However, upon information and belief, Defendant GE is seeking to introduce and market the GE Imitation Device in the United States.

44. Paragraph 44 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '439 patent; otherwise denied.

45. Paragraph 45 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '439 patent; otherwise denied.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 9,402,595

46. Plaintiff Spectrum incorporates by reference the responses to Defendant GE's assertions forth in Paragraphs 1–45 above.

47. Paragraph 47 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '595 patent; otherwise denied.

48. Paragraph 48 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, denied.

49. Paragraph 49 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “plurality of detector units,” “distributed,” “bore,” and “radially articulable” as attributed by GE without context or explanation, as well as the origin of the picture in Paragraph 49 of the GE Amended Counterclaims as there is no corresponding picture on page 1 of Exhibit C that Defendant GE alleges reflects the Spectrum Veriton® to admit or deny any such allegation, and accordingly, denies the same.

50. Paragraph 50 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “plurality of detector units,” and “controller operably coupled to the plurality of detector units and configured to control the positioning of the detector units” as attributed by GE without context or explanation, as well as the origin of the screenshot in Paragraph 50 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in operation to admit or deny any such allegation, and accordingly, denies the same.

51. Paragraph 51 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “controller,” “forms a ring,” “configured to position an external group of the plurality of detector units,” and “predetermined intermediate position corresponding to a ring” as attributed by GE without context or explanation, as well as the origin of the image in Paragraph 51 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in operation to admit or deny any such allegation, and accordingly, denies the same.

52. Paragraph 52 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “controller,” “ring,” and “internal group of the plurality of detector units” as attributed by GE without context or explanation, as well as the origin of the image in Paragraph 51 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in operation to admit or deny any such allegation, and accordingly, denies the same.

53. Paragraph 53 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “acquire imaging information of the object,” “external group of detectors,” “intermediate position,” “detectors of the internal group” and “ring” as attributed by GE without context or explanation to admit or deny any such allegation, and accordingly, denies the same.

54. Paragraph 54 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “configured to pivot about a detector axis,” “bore,” and “swept over a range during image acquisition” as attributed by GE without context or explanation, as well as the origin of the image in Paragraph 54 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in operation to admit or deny any such allegation, and accordingly, denies the same.

55. Paragraph 55 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “controller,” “detector units,” “initial position,” and “disposed externally of the intermediate position” as attributed by GE without context or explanation, as well as the origin of the images in Paragraph 55 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in operation to admit or deny any such allegation, and accordingly, denies the same.

56. Paragraph 56 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “controller,” “detector units,” “initial position,” and “intermediate position” as attributed by GE without context or explanation, as well as the origin of the images in Paragraph 55 of the GE Amended Counterclaims that Defendant GE alleges reflects the Spectrum Veriton® in

operation to admit or deny any such allegation, and accordingly, denies the same.

57. Paragraph 57 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Plaintiff Spectrum is without sufficient knowledge or information as to the meaning of, at least, the terms “plurality of sensing devices,” “plurality of detector units,” and “controller” as attributed by GE without context or explanation to admit or deny any such allegation, and accordingly, denies the same.

58. Paragraph 58 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, admitted that Spectrum’s analysis of the ‘595 patent – with the hindsight of learning of the GE Imitation Device – revealed GE’s misappropriation and theft of certain Spectrum Trade Secrets as set out in the First Amended Complaint [D.I. 37]; otherwise denied.

59. Paragraph 59 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the ‘595 patent; otherwise denied.

60. Paragraph 60 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the ‘595 patent; otherwise denied.

61. Paragraph 61 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or

co-owner of the '595 patent; otherwise denied.

62. Paragraph 62 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '595 patent; otherwise denied.

63. Paragraph 63 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '595 patent; otherwise denied.

64. Paragraph 64 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '595 patent; otherwise denied.

65. Plaintiff Spectrum is without sufficient knowledge or information to admit or deny the allegations in Paragraph 65 of the GE Amended Counterclaims, and accordingly denies the same. However, upon information and belief, Defendant GE is seeking to introduce and market the GE Imitation Device in the United States.

66. Paragraph 66 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '595 patent; otherwise denied.

67. Paragraph 67 of the Amended GE Counterclaims contains only legal argument and/or conclusions, and therefore does not require a response. To the extent that this paragraph contains any factual allegation requiring a response, Spectrum is an owner or co-owner of the '595 patent; otherwise denied.

DEMAND FOR JURY TRIAL

68. Spectrum does not object to Defendant GE's request for a trial by jury, and Spectrum further requests that all defenses to the Amended GE Counterclaims be tried by jury as well.

PRAYER FOR RELIEF

The "Prayer for Relief" does not contain any allegations for which a response is required. To the extent that any response is required, Plaintiff Spectrum denies any allegations in the "Prayer for Relief." In particular, Plaintiff Spectrum denies that Defendant GE is entitled to any form of relief whatsoever in this action.

FIRST AFFIRMATIVE DEFENSE
(Failure to State a Claim)

Defendant GE's Counterclaims fail to state a claim upon which relief can be granted.

SECOND AFFIRMATIVE DEFENSE
(Non-infringement)

Plaintiff Spectrum is not infringing, has not infringed, and will not infringe, directly or indirectly, any valid and enforceable asserted claim of the '439 patent and/or the '595 patent, either literally or under the doctrine of equivalents.

THIRD AFFIRMATIVE DEFENSE
(No Contributory Infringement)

Plaintiff Spectrum is not contributorily infringing, has not contributorily infringed, and will not contributorily infringe, any valid and enforceable asserted claim of the '439 patent or the '595 patent, either literally or under the doctrine of equivalents.

FOURTH AFFIRMATIVE DEFENSE
(Ownership)

Plaintiff Spectrum is a legal owner or co-owner of the '439 patent and '595 patent by virtue of the fact that, at least, Spectrum employees Yoel Zilberstien and Nathaniel Roth are inventors and/or co-inventors of the '439 patent and '595 patent.

FIFTH AFFIRMATIVE DEFENSE
(Prosecution History Estoppel)

Any assertion by Defendant GE that either the Veriton® or Veriton-CT® infringe the asserted claims of the ‘439 patent and the ‘595 patent is barred by the doctrine of prosecution history estoppel or otherwise by virtue of admissions, amendments, arguments, representations and/or misrepresentations made to the United States Patent and Trademark Office during the prosecution of the application(s) from which the ‘439 patent and/or the ‘595 patent issued.

SIXTH AFFIRMATIVE DEFENSE
(Invalidity)

The asserted claims of the ‘439 patent and the ‘595 patent are invalid under 35 U.S.C. § 101 *et seq.*, including, but not limited to, 35 U.S.C. §§ 101, 102, 103, 112, 132, 156 and/or 253.

SEVENTH AFFIRMATIVE DEFENSE
(Equitable Defenses)

Defendant GE is barred from recovery, in whole or in part, by one or more of the equitable doctrines of laches, waiver, estoppel, prosecution history estoppel, and unclean hands.

EIGHTH AFFIRMATIVE DEFENSE
(Costs)

Defendant GE is barred from recovering costs under 35 U.S.C. § 288.

NINTH AFFIRMATIVE DEFENSE
(Damages)

Any damages suffered by Defendant GE are limited by 35 U.S.C. §§ 286 and 287, and Defendant GE is not entitled to enhanced or increased damages for willful infringement because Plaintiff Spectrum has not engaged in any conduct that meets the applicable standard for willful infringement.

Plaintiff Spectrum reserves the right to supplement these defenses and/or to assert

additional defenses that may become known to it, through discovery or otherwise.

COUNTERCLAIMS³

Plaintiff-Counterclaimant Spectrum Dynamics Medical Limited (“Spectrum”), by way of Counterclaims for Declaratory Judgment against Defendants GE, Hefetz and Steinfeld, alleges as follows:

PARTIES

1. Plaintiff-Counterclaimant Spectrum is a limited company organized under the laws of the British Virgin Islands having its principal offices at P.O. Box 957 Offshore Incorporations Centre Road Town, Tortola, British Virgin Islands.

2. Defendant General Electric Company (“GE”) is a corporation organized under the laws of the State of New York with its principal place of business at 5 Necco Street, Boston, MA 02210.

3. Upon information and belief, Defendant Yaron Hefetz is a citizen of the State of Israel, residing at PO 184, Kibbutz Alonim, Israel.

4. Upon information and belief, Defendant Sergio Steinfeld is a citizen of the State of Israel, residing at 8 Zeev Vilnai Street, Haifa, Israel.

JURISDICTION AND VENUE

5. This Court has subject matter jurisdiction over Plaintiff-Counterclaimant Spectrum’s counterclaims (“Spectrum Counterclaims”) pursuant to 28 U.S.C. §§ 1331 and

³ Although Fed. R. Civ. P. 7 does not expressly permit counterclaims in a reply, the Counterclaims asserted in this Reply by Plaintiff-Counterclaimant Spectrum are compulsory counterclaims pursuant to Fed. R. Civ. P. 13(a), which under Federal Circuit law will be waived if not asserted in response to the patent infringement allegations in the Amended GE Counterclaims. *Polymer Indus. Prod. Co. v. Bridgestone/Firestone, Inc.*, 347 F.3d 935, 938 (Fed. Cir. 2003); *Int’l Controls & Measurements Corp. v. Honeywell Int’l, Inc.*, 2013 U.S. Dist. LEXIS 127960 *19-20 n.10 (N.D.N.Y. 2013)(finding Federal Circuit law controls in determining compulsory counterclaims); *Epic Games, Inc. v. Acceleration Bay LLC*, 2020 U.S. Dist. LEXIS 58327 *3-11 (N.D. Ca. 2020)(denying motion to dismiss compulsory counterclaims of patent non-infringement and invalidity in reply); *Intervet, Inc. v. Merial Ltd.*, 535 F. Supp. 2d 112, 115 (D. DC. 2008)(same).

1338(a) in that these counterclaims arise under the federal patent statutes, 35 U.S.C. §§ 271 *et seq.*

6. This Court has personal jurisdiction over Defendant GE at least because, in filing its patent infringement counterclaims in this case, Defendant GE has submitted to the personal jurisdiction of this Court.

7. Additionally, this Court has personal jurisdiction over Defendant GE because Defendant GE is a New York corporation and has regularly solicited and transacted business activities in this District, engaged in a persistent course of conducting business in this District, and derived substantial revenue from goods and services sold in this District.

8. This Court has personal jurisdiction over Defendant Hefetz, at least because Mr. Hefetz is the sole named inventor of the ‘439 patent and a named co-inventor of the ‘595 patent being asserted herein against Spectrum, and the respective patent assignment documents (Ex. D, ‘439 patent assignment(s); Ex. E, ‘595 patent assignment; collectively “the Patent Assignment Documents”) reference other agreements between Defendant GE and Mr. Hefetz, which Defendant GE has refused to provide (Ex. C, July 17 and 21, 2020 email exchange between Spectrum’s and Defendants’ counsel), such that upon information and belief, Mr. Hefetz retains a legal and/or financial interest in the ‘439 patent and is receiving remuneration or benefits from the assertion thereof against Spectrum. Defendant Hefetz has accordingly purposely availed himself of remedies for alleged patent infringement in this Court.

9. The Patent Assignment Documents illustrate that it is reasonably foreseeable that Defendant Hefetz would be haled into Court in connection with an infringement action – especially where Defendant Hefetz is the sole inventor of the asserted ‘439 patent, where inventorship is challenged.

10. Specifically, the Patent Assignment Documents contain the following provision:

I will communicate to the Company or its representatives or nominees any facts known to me respecting the inventions and improvements *and testify in any legal proceeding*, make all rightful oaths, sign all lawful papers and execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights in all countries including, but not limited to, any provisional, non-provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, for any derivation proceedings relating thereto, and, as to any patents that issue from such applications, for any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, **and generally do everything possible to aid the Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for the invention and its improvements in all countries.**

(Ex. D, ‘439 patent assignment; see also, Ex. E, ‘595 patent assignment)(emphasis added).

11. Because inventorship of the ‘439 patent and the ‘595 patent is a central issue of the Amended GE Counterclaims, upon information and belief, Defendant Hefetz is providing assistance to Defendant GE at this time and will provide evidence and testimony in this action as contemplated in the Patent Assignment Documents.

12. Upon information and belief, Defendant GE as required by FRCP 11 (where inventorship is a central issue) has consulted and is consulting with Defendant Hefetz at least because he is the only named inventor of the ‘439 patent. As such, Defendant Hefetz is doing “everything possible to aid [Defendant GE] ... enforce proper patent protection...”

13. Taking Defendant Hefetz’ purposeful availment of this Court and its powers in combination with Defendant Hefetz’ express agreement to “testify in any legal proceeding,” this Court may properly exercise personal jurisdiction over Defendant Hefetz.

14. This Court has personal jurisdiction over Defendant SERGIO STEINFELD by virtue of his receipt of the proprietary and/or confidential Spectrum Information under ¶ 6 of the “AMENDED AND RESTATED MUTUAL CONFIDENTIALITY AND NON-USE AGREEMENT” (Ex. 1 to the First Amended Complaint [D.I. 37], the “2009

Agreement”) under which GE’s Representatives, as defined in the 2009 Agreement, who received access to the Spectrum Information are under an express agreement to be bound by the terms of the 2009 Agreement including submitting to personal jurisdiction in this Court.

15. Venue in the Southern District of New York is proper pursuant to 28 U.S.C. §§ 1391(b)(3) and 1391(c)(3).

16. Additionally, Defendants have waived any challenge to venue by filing the patent infringement counterclaims in this Court.

THE PATENTS-IN-SUIT

The ‘439 Patent

17. U.S. Patent No. 9,295,439 (Ex. A, “the ‘439 patent”), entitled “Weight Compensation of Radiation Detectors,” was purportedly issued on March 29, 2016, naming General Electric Company as assignee.

18. The sole named inventor of the ‘439 patent is Defendant Yaron Hefetz.

19. Spectrum has asserted that it is a legal and rightful owner or co-owner of the ‘439 patent as discussed in the First Amended Complaint at Paragraphs 661-674. [D.I. 37].

The ‘595 Patent

20. U.S. Patent No. 9,402,595 (Ex. B, “the ‘595 patent”), entitled “System and Method for Positioning Detector Heads,” was purportedly issued on August 2, 2016, naming General Electric Company as assignee.

21. The named inventors of the ‘595 patent are Defendants Yaron Hefetz and Sergio Steinfeld, as well as Avi Bar-Shalev and Gil Kovalski.

22. Spectrum has asserted that it is a legal and rightful owner or co-owner of the ‘595 patent as discussed in the First Amended Complaint at Paragraphs 661-674. [D.I. 37].

**FIRST COUNTERCLAIM:
DECLARATORY JUDGMENT OF NON-INFRINGEMENT
OF THE '439 PATENT**

23. Plaintiff-Counterclaimant Spectrum incorporates by reference, as though fully set forth herein, Paragraphs 1-22 of the Spectrum Counterclaims.

24. Plaintiff-Counterclaimant Spectrum has not, does not, and will not directly infringe, contributorily infringe or induce others to infringe any asserted properly construed, valid, and enforceable claim of the '439 patent either literally or under the doctrine of equivalents.

25. The manufacture, use, sale, offer for sale, and importation into the United States of, the Spectrum Veriton® and Veriton® devices, will not directly or indirectly infringe any asserted valid and enforceable claims of the '439 patent, either literally or under the doctrine of equivalents, under any subsection of 35 U.S.C. § 271.

26. Plaintiff-Counterclaimant Spectrum is entitled to Declaratory Judgment of non-infringement of the asserted claims of the '439 patent.

**SECOND COUNTERCLAIM:
DECLARATORY JUDGMENT OF INVALIDITY OF THE '439 PATENT**

27. Plaintiff-Counterclaimant Spectrum incorporates by reference, as though fully set forth herein, Paragraphs 1-26 of the Spectrum Counterclaims.

28. The asserted claims of the '439 patent are invalid under 35 U.S.C. §101 *et seq.*, including §§ 101, 102, 103, 112, 132, 156 and/or 253.

Improper Inventorship

29. At least, current Spectrum employees Yoel Zilberstien and Nathaniel Roth should have been named inventors or co-inventors of the asserted claims of the '439 patent as these claims recite Spectrum Trade Secret E: Use of a counterweight system to balance detector arm's movements.

30. Spectrum Trade Secret E was invented no later than June 2011 by, at least, Yoel Zilberstien and Nathaniel Roth.


31. Spectrum Trade Secret E was then revealed to GE diligence personnel during due diligence (through discussions, examples/simulations and presentations) well before the application that matured into the '439 patent was filed on July 9, 2014. Specifically, Trade Secret E was revealed to GE diligence personnel during the January 24, 2012 on-site due diligence meeting and in communications continuing through February 2012 in accordance with the protections and obligations of the 2009 Agreement.

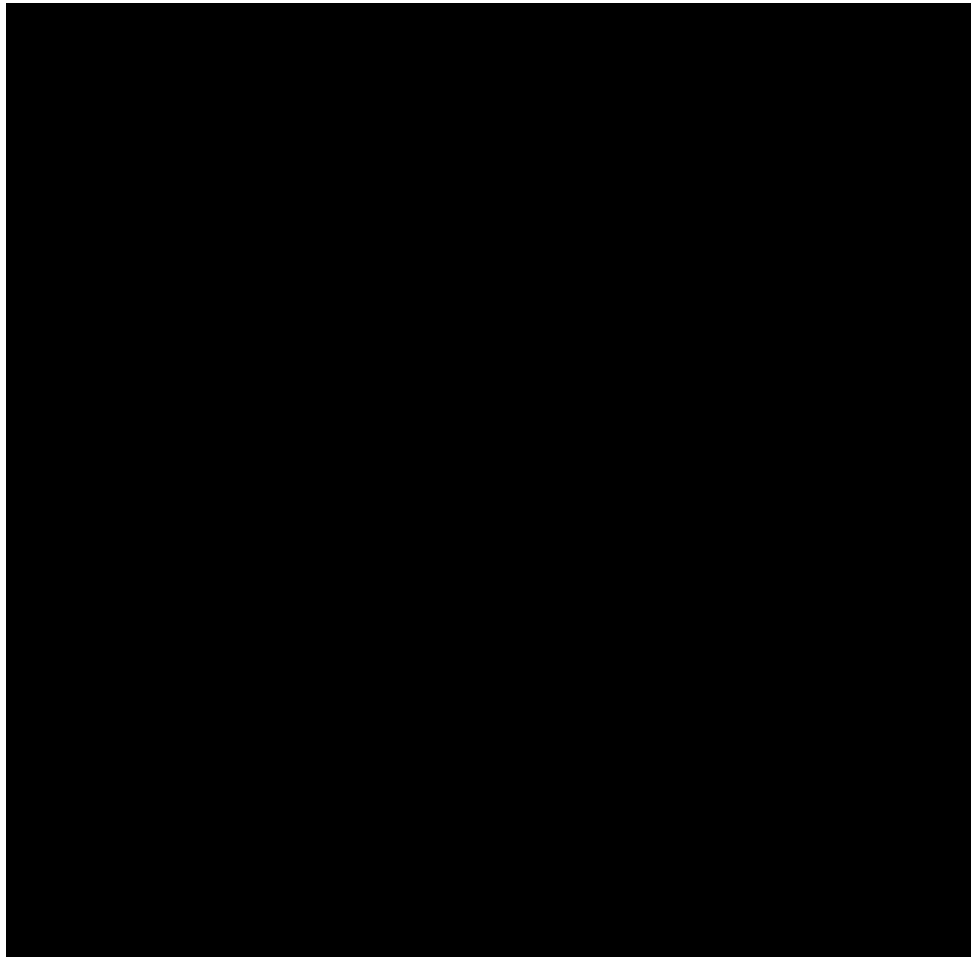
32. The GE diligence personnel attending the meetings and to whom Spectrum Trade Secret E was disclosed, included, at least, Nathan Hermony, Reuven Brenner, Arie Eshco, Riyadh Mahameed, and Sergio Steinfeld. Trade Secret E was also disclosed to other GE diligence personnel including Jean-Paul Bouhnik, Osnat Zak, Alexander Ganin, and Floris Jansen.

33. The information disclosed was included in the 2012 Due Diligence presentations (as discussed in the First Amended Complaint at Paragraph 188 [D.I. 37]), and materials from the data room, as well as the February 15, 2012 email to Riyadh Mahameed, of the GE diligence team, from Nathaniel Roth which included the updated "Jaszczak simulation," which was a detailed simulation(s) based upon a digital "patient" provided by GE.

34. The use of a counterweight system with detection arms serves to balance the detector unit's movements for easy and safe control. Plaintiff-Counterclaimant Spectrum appreciated the potential danger associated with bringing movable detectors into close proximity to the body, and showed GE how to protect patients from harmful detector contact by employing a counterweight system. Safety mechanisms such as the counterweight system invented by Spectrum are a crucial design component necessary for patient safety and

regulatory submission, as evidenced by a recent GE recall of nearly 1,000 of its imaging devices after the top detector of one of its systems detached and fell on the detector below. As noted by the FDA, “there remains a risk of potential life-threatening bodily harm if the detector were to detach and fall during a patient exam.” (<https://www.fda.gov/MedicalDevices/Safety/ListofRecalls/ucm625950.htm>).

35. A sample drawing which was provided to GE is provided below. Spectrum also provided GE with a video presentation demonstrating Spectrum’s counterweight in action in connection with its novel 



36. Upon information and belief, one or more of the noted GE diligence personnel improperly provided the information and materials comprising and relating to Spectrum Trade Secret E to Defendant Hefetz, who later drafted the application in his own name that matured into the ‘439 patent on July 9, 2014.

37. Spectrum Trade Secret E was a substantial advance over the state of the art of Nuclear Medicine (NM) imaging.

38. The asserted claims of the '439 patent recite the invention of Spectrum Trade Secret E.

39. For example: (i) claims 1, 9, 17 of the '439 patent recite imaging systems comprising a weight-compensation/counter balanced weight to balance the movements of the detection units; and (ii) Figures 3-7 provide support for the claims and illustrate a weight compensation unit and an imaging system wherein some of the columns includes weight compensation units.

40. As such, at least, Yoel Zilberstien and Nathaniel Roth made significant contributions to the conception and/or reduction to practice of the inventions of the '439 patent.

41. For these reasons as well as those set forth in the First Amended Complaint at Paragraphs 661-674 [D.I. 37] asserting the Section 256 correction of inventorship claim against the '439 patent, which are incorporated by reference herein, at least, Yoel Zilberstien and Nathaniel Roth, who contributed to the inventions claimed in the '439 patent (at least asserted independent claims 1, 9, 17 and all claims depending therefrom), should therefore be named as inventors or co-inventors of at least the asserted claims.

42. Upon information and belief, Defendant Hefetz and individuals under control of Defendant GE began preparing the patent application that matured unto the '439 patent before Trade Secret E was disclosed in Spectrum's PCT/IB2013/053721 (Ex. F, "the '721 PCT")(filed as WO 2013/168111 and then U.S. Application No. 14/399,975, and published as U.S. Patent Pub. No. 2015/011970), which first published on November 14, 2013.

43. Defendant GE has not alleged that the purported invention of the asserted claims of the '439 patent was developed independently of and without access to Spectrum Trade Secret E.

44. Defendant Hefetz has not alleged that the purported invention of the asserted claims of the '439 patent was developed independently of and without access to Spectrum Trade Secret E.

45. Defendant GE has not alleged that the purported invention of the asserted claims of the '439 patent was developed based upon the disclosures of Spectrum's '721 PCT.

46. Defendant Hefetz has not alleged that the purported invention of the asserted claims of the '439 patent was developed based upon the disclosures of Spectrum's '721 PCT.

47. GE diligence personnel were aware of the '721 PCT before the '439 patent application was filed on July 9, 2014.

48. Defendant Hefetz was aware of the '721 PCT before the '439 patent application was filed on July 9, 2014.

49. Dean D. Small, and other individuals, at the Small Law Group LLP were counsel of record in the prosecution of the '439 patent. (*See, e.g.*, Ex. A, '439 patent face).

50. Mr. Small, and other individuals, at the Small Law Group LLP were counsel of record in the prosecution of U.S. Patent No. 9,192,346 ("the '346 patent"). (*See, e.g.*, Ex. H, '346 patent, face).

51. During prosecution of the '346 patent, Mr. Small of the Small Law Group LLP caused one of the counsel of record at the Small Law Group LLP to submit an Information Disclosure Statement ("IDS") dated October 29, 2014 identifying the '721 PCT as prior art. (Ex. I, '982 patent October 29, 2014 IDS).

52. The ‘439 patent was being prosecuted before the United States Patent and Trademark Office (“USPTO”) on October 29, 2014 by Mr. Small, and other counsel of record, at the Small Law Group LLP.

53. Mr. Small, and other individuals, at the Small Law Group LLP were counsel of record in the prosecution of U.S. Patent No. 9,392,982 (“the ‘982 patent”). (*See, e.g.*, Ex. J, ‘982 patent, face).

54. During prosecution of the ‘982 patent, Mr. Small of the Small Law Group LLP executed and submitted an IDS dated October 21, 2015 identifying the ‘721 PCT as prior art. (Ex. K, ‘982 patent October 21, 2015 IDS).

55. The ‘439 patent was being prosecuted before the USPTO on October 21, 2015 by Mr. Small, and other counsel of record, at the Small Law Group LLP.

56. At least, Mr. Small of the Small Law Group LLP knew of the Spectrum ‘721 PCT during the prosecution of the ‘439 patent.

57. Spectrum’s ‘721 PCT was concealed and not cited to the examiner during the prosecution of the ‘439 patent before the USPTO.

58. The fact that Yoel Zilberstien and Nathaniel Roth are the true inventors or co-inventors of the ‘439 patent and that Defendants Hefetz and GE were misappropriating Spectrum’s Trade Secrets were also concealed from the Examiner.

Anticipated/Obvious Over the ‘721 PCT

59. The Spectrum ‘721 PCT is directed to the same field as the ‘439 patent.

60. The ‘439 patent, in the “Background of the Invention” section, states that:

The subject matter disclosed herein relates generally to an apparatus and method for diagnostic medical imaging, such as Nuclear Medicine (NM) imaging. In NM imaging, systems with multiple detectors or detector heads may be used to capture an image of a subject, or to scan a region of interest. For example, the detectors may be positioned near the subject to acquire NM data, which is used to generate a three-dimensional (3D) image of the subject.

(Ex. A, ‘439 patent, col. 1, lines 5-14).

61. The Spectrum ‘721 PCT identifies the same “Field of Invention” as follows:

The present invention, in some of its embodiments, relates to apparatus and methods of tomography in the field of nuclear medicine (sometimes referred to herein as “N-M tomography”), and more particularly to N-M tomography systems as a whole, collimated detector configurations for N-M tomography systems, and methods of using NM tomography systems and detectors.

(Ex. F, ‘721 PCT, page 1, lines 4-8)(emphasis added).

62. The Spectrum ‘721 PCT published on November 14, 2013 before the ‘439 patent was filed on July 9, 2014.

63. The Spectrum ‘721 PCT is prior art to the ‘439 patent under at least 35 U.S.C. § 102(a)(2) (AIA).

64. Defendants admit that the ‘721 PCT discloses Spectrum Trade Secret E: Use of a counterweight system to balance detector arm’s movements. (Defendants’ Amended Answer, [D.I. 89] at ¶ 274).

65. The Spectrum ‘721 PCT further discloses devices and methods of counterbalancing multiple detector heads with counterweights for diagnostic medical imaging, such as Nuclear Medicine (NM) imaging.

66. For example, the Spectrum ‘721 PCT teaches that

“Optionally, rapid reconfiguration (e.g., faster than 2 hours, 1 hour, 30 minutes, 10 minutes, 5 minutes per detector head) **of the detector heads from one position and/or orientation to another for step and shoot operation is facilitated by** a light-weight design of the detector heads and/or by **counterbalancing.”**

(Ex. F, ‘721 PCT, page 23, lines 9-13; *see also id.* page 39, lines 15-16)(emphasis added).

67. The ‘721 PCT also teaches:

w. Permitting the detector heads to make contact with the patient’s body, but with such a low contact force and/or velocity that injury to the patient does not occur.

x. **Counterbalancing the detector heads so the force needed to extend the detector heads is acceptably and safely small.** Optionally, the force is small enough so that a patient can easily resist the force or can move the detector array away from his or her body by hand if necessary. The optional small effective mass of the individual detector heads, allows the velocity to be easily reduced before impact.

y. **The detector head counterbalancing mechanisms include adaptive motion feedback capability for safety control and acquisition continuation if the detector head is touched or pushed back, for example, by the patient.**

(Ex. F, '721 PCT, page 42, lines 20-29)(emphasis added).

68. Figures 6E and 6F of the Spectrum '721 PCT depict these counterweights, which are denoted by reference number [632], and are reproduced below.

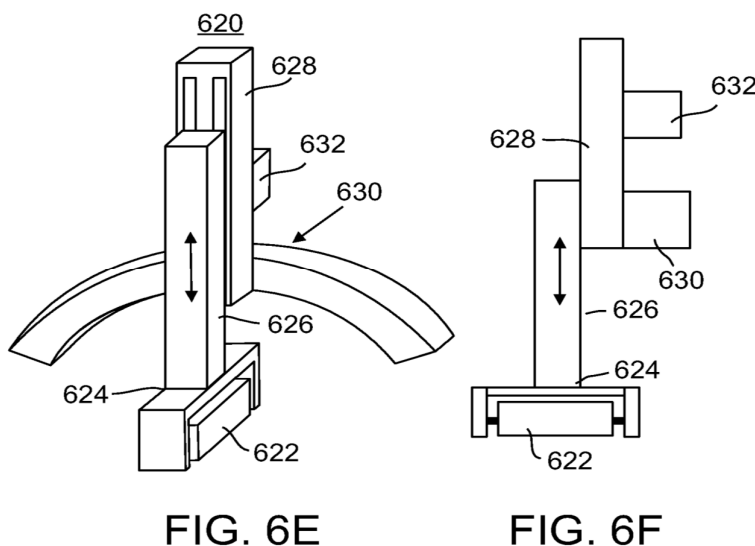


FIG. 6E

FIG. 6F

69. In regard to the counterweights pictured in Figures 6E and 6F and pictured in Paragraph 68 above, the Spectrum '721 PCT teaches:

A weight 632 chosen to balance the weight of detector head 622 and arm 626 is moveably mounted on rail 628 and attached to arm 626 for example, by a suitable pulley arrangement and belt or cable or in any other suitable and/or desired manner.

(Ex. F, '721 PCT, page 51, lines 26-28).

70. The Spectrum '721 PCT further teaches:

Attached to the chain are travelers 638 and 640, which respectively carry detector head 622 and its arm 626, and counterweight 632. As will be appreciated, in an exemplary embodiment of the invention, when the chain is driven, the detector head and counterweight move in opposite directions, as indicated by arrows 644 and 646. Such an arrangement allows use of a very small force for extension and retraction while gravitation does not produce any motion or resistance since the counterweight provides a balancing counter force equal to the projection of the total force (vector) along the path of linear motion.

(Ex. F, '721 PCT, page 52, lines 9-15).

71. The asserted claims of the '439 patent all recite a "weight compensation unit" and/or "counter balance(d) weight." (*See, e.g.*, Ex. A, '439 patent, claims 1, 2, 9 and 17).

72. The '439 patent specification discloses the recited "weight compensation unit" as follows: "A weight compensation unit is provided including a counter balanced weight to enable ease of movement of the detectors within each movable section." (Ex. A, '439 patent, col. 3, lines 2-4).

73. If the asserted claims of the '439 patent are construed as Defendant GE asserts to cover the Spectrum Veriton®, the asserted claims of the '439 patent are anticipated and/or rendered obvious by the teachings of the '721 PCT.

74. The Spectrum '721 PCT was never considered by the examiner during prosecution of the '439 patent.

75. Plaintiff-Counterclaimant Spectrum is therefore entitled to Declaratory Judgment that the asserted claims of the '439 patent are invalid for at least the reasons stated above.

THIRD COUNTERCLAIM:
DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE '439 PATENT
FOR UNCLEAN HANDS

76. Plaintiff-Counterclaimant Spectrum incorporates by reference, as though fully set forth herein, paragraphs 1-75 of the Spectrum Counterclaims.

77. Defendant Hefetz and Defendant GE have asserted that Defendant Hefetz was not aware of or subject to the 2009 Agreement (*See* Defendants' Motion to Dismiss [D.I. 52 and 53]).

78. Nevertheless, GE diligence personnel, including at least Defendant Steinfeld, disclosed proprietary and/or confidential Spectrum Information, including confidential and proprietary details of the Spectrum Veriton®, protected by the non-use and non-disclosure

provisions of the 2009 Agreement, to Defendant Hefetz while preparing the application that matured into the '595 patent, which was filed January 29, 2014 – before the application that matured into the '439 patent was filed on July 9, 2014.

79. Taking this improperly provided proprietary and/or confidential Spectrum Information into account, Defendant Hefetz drafted claims that issued in the '439 patent in an attempt to impede Spectrum's development and introduction of the Spectrum Veriton®.

80. At the time Defendant Hefetz was drafting the application that matured into the '439 patent and after issuance thereof, the USPTO guidelines and the Manual of Patent Examining Procedure ("MPEP") in force was the Ninth edition.

81. At the time Defendant Hefetz was drafting the application that matured into the '439 patent, the USPTO guidelines and MPEP did not consider "nonce" words to invoke means-plus-function under 35 U.S.C. § 112. (*See, e.g.*, Ex. G, MPEP 2181, 9th ed. (2014-2018)).

82. Defendant Hefetz further concealed the substantial contribution of, at least, Yoel Zilberstien and Nathaniel Roth as inventors or co-inventors of at least the asserted claims of the '439 patent from the USPTO.

83. Defendant Hefetz – on behalf of Defendant GE – performed these improper acts in order to provide Defendant GE an improper business advantage over Spectrum by obtaining a patent to assert against the Spectrum Veriton®.

84. Upon information and belief, Defendant Hefetz also anticipated and expected to personally benefit from this improper business advantage, including obtaining a patent to which he was not entitled, in that Defendant Hefetz would and is now benefiting and receiving remuneration from Defendant GE's assertion of the '439 patent against Spectrum pursuant to the other agreements referenced in the Patent Assignment Documents.

85. For at least these reasons and those in Paragraphs 549-559 and 639-660 of the

First Amended Complaint [D.I. 37], Plaintiff-Counterclaimant Spectrum is entitled to Declaratory Judgment of unenforceability for unclean hands of, at least, the asserted claims of the '439 patent.

**FOURTH COUNTERCLAIM:
DECLARATORY JUDGMENT OF NON-INFRINGEMENT
OF THE '595 PATENT**

86. Plaintiff-Counterclaimant Spectrum incorporates by reference, as though fully set forth herein, Paragraphs 1-85 of the Spectrum Counterclaims.

87. Plaintiff-Counterclaimant Spectrum has not, does not, and will not directly infringe, contributorily infringe or induce others to infringe any asserted properly construed, valid, and enforceable claim of the '595 patent either literally or under the doctrine of equivalents.

88. The manufacture, use, sale, offer for sale, and importation into the United States of, the Spectrum Veriton® and Veriton® devices, will not directly or indirectly infringe any asserted valid and enforceable claims of the '595 patent, either literally or under the doctrine of equivalents, under any subsection of 35 U.S.C. § 271.

89. Plaintiff-Counterclaimant Spectrum is entitled to Declaratory Judgment of non-infringement of the asserted claims of the '595 patent.

**FIFTH COUNTERCLAIM:
DECLARATORY JUDGMENT OF INVALIDITY OF THE '595 PATENT**

90. Plaintiff-Counterclaimant Spectrum incorporates by reference, as though fully set forth herein, paragraphs 1-89 of the Spectrum Counterclaims.

91. The asserted claims of the '595 patent are invalid under 35 U.S.C. §101 *et seq.*, including §§ 101, 102, 103, 112, 132, 156 and/or 253.

Improper Inventorship

92. At least, current Spectrum employees Yoel Zilberstien and Nathaniel Roth should have been named inventors or co-inventors of the '595 patent as these claims recite Spectrum Trade Secret I: Partial use of ring SPECT detectors for improved proximity.

93. Spectrum Trade Secret I was invented no later than October 2009 by, at least, Yoel Zilberstien and Nathaniel Roth.

94. The information disclosed was included in the 2009 Due Diligence presentations (as discussed in the First Amended Complaint at Paragraph 185 [D.I. 37]) and the 2012 Due Diligence presentations, and materials from the data room as well.

95. The concept of Spectrum Trade Secret I was revealed to GE diligence personnel at least during the July 29-30, 2009 meeting, and thereafter a more comprehensive overview of Trade Secret I was revealed to GE diligence personnel during at least the January 24, 2012 on-site due diligence meeting and in communications continuing through February 2012.

96. The GE diligence personnel attending the 2009 meeting and to whom the working concept of Spectrum Trade Secret I was disclosed included Nathan Hermony, Geoff Martha, Shuchi Verandani and Erez Levy.

97. The GE diligence personnel attending the 2012 meetings and to whom Spectrum Trade Secret I was disclosed included Nathan Hermony, Reuven Brenner, Arie Eshco, Riyadh Mahameed, and Sergio Steinfeld. Trade Secret I was also disclosed to other GE diligence personnel including Jean-Paul Bouhnik, Osnat Zak, Alexander Ganin, and Floris Jansen.

98. Spectrum Trade Secret I was developed to improve detector proximity by using only part of the detector population.

99. [REDACTED]

100. Plaintiff-Counterclaimant Spectrum also disclosed simulations including the updated “Jaszczak simulation,” which was a detailed simulation(s) based upon a digital “patient” provided by GE, in Nathaniel Roth’s February 15, 2012 email to Riyadh Mahameed of the GE diligence team.

101. Upon information and belief, the noted GE diligence personnel, including Defendant Steinfeld, improperly provided the information and materials comprising and relating to Spectrum Trade Secret I to Defendant Hefetz, as well as Avi Bar-Shalev and Gil Kovalski, who were not GE diligence personnel, who later caused the application to be filed in their names that matured into the ‘595 patent on January 24, 2014.

102. Defendant Steinfeld is subject to the 2009 Agreement.

103. Upon information and belief, Defendant Steinfeld executed the 2009 Agreement.

104. Upon information and belief, named inventor Avi Bar-Shalev did not execute the 2009 Agreement.

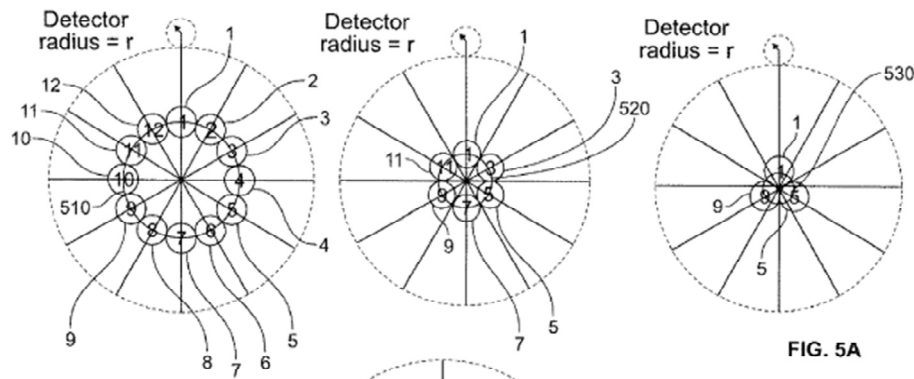
105. Upon information and belief, named inventor Gil Kovalski did not execute the 2009 Agreement.

106. Spectrum Trade Secret I was a substantial advance over the state of the art of NM imaging.

107. The asserted claims of the '595 patent include the invention of Spectrum Trade Secret I.

108. Independent claims 1, 11 and 18 of the '595 patent respectively recite an imaging system, a method and a tangible computer readable medium where less than the full 12 detector heads are used to improve proximity to the target (internal detectors) while the remaining external detectors could be also used.

109. Figure 5A of the '595 patent illustrates that the gantry's detector heads are to be partially used to form smaller gantry bore sizes (from 12 detectors heads to 6 and 3) and improve the proximity to target. Figure 5A is reproduced below:



110. As such, at least, Yoel Zilberstien and Nathaniel Roth made significant contributions to the conception and/or reduction to practice of the inventions of the '595 patent.

111. For these reasons, as well as those set forth in the First Amended Complaint at Paragraphs 661-674 [D.I. 37] asserting the Section 256 correction of inventorship claim against the '595 patent, which are incorporated by reference herein, at least, Yoel Zilberstien and Nathaniel Roth, who contributed to the inventions claimed in the '595 patent (at least

asserted claims 1 and all claims depending therefrom, as well as claims 11 and 18), should therefore be named as inventors or co-inventors of at least the asserted claims.

112. Upon information and belief, Defendant Hefetz and individuals under control of Defendant GE began preparing the patent application that matured into the '595 patent before Spectrum Trade Secret I was disclosed in the '721 PCT, which first published on November 14, 2013.

113. Defendant GE has not alleged that the purported invention of the asserted claims of the '595 patent was developed independently of and without access to Spectrum Trade Secret I.

114. Defendant Hefetz has not alleged that the purported invention of the asserted claims of the '595 patent was developed independently of and without access to Spectrum Trade Secret I.

115. Defendant Steinfeld has not alleged that the purported invention of the asserted claims of the '595 patent was developed independently of and without access to Spectrum Trade Secret I.

116. Defendant GE has not alleged that the purported invention of the asserted claims of the '595 patent was developed based upon the disclosures of Spectrum's '721 PCT.

117. Defendant Hefetz has not alleged that the purported invention of the asserted claims of the '595 patent was developed based upon the disclosures of Spectrum's '721 PCT.

118. Defendant Steinfeld has not alleged that the purported invention of the asserted claims of the '595 patent was developed based upon the disclosures of Spectrum's '721 PCT.

119. GE diligence personnel were aware of the '721 PCT before the '595 patent application was filed January 29, 2014.

120. Defendant Hefetz was aware of the '721 PCT before the '595 patent application was filed January 29, 2014.

121. Defendant Steinfeld was aware of the '721 PCT before the '595 patent application was filed January 29, 2014.

122. Mr. Small, and other individuals, at the Small Law Group LLP were counsel of record in the prosecution of the '595 patent. (*See, e.g.*, Ex. B, '595 patent, face).

123. Mr. Small, and other individuals, at the Small Law Group LLP were counsel of record in the prosecution of the '346 patent. (*See, e.g.*, Ex. H, '346 patent, face).

124. During prosecution of the '346 patent, Mr. Small of the Small Law Group LLP caused one of the counsel of record at the Small Law Group LLP to submit an IDS dated October 29, 2014 identifying the '721 PCT as prior art. (Ex. I, '346 patent October 29, 2014 IDS).

125. The '595 patent was being prosecuted before the USPTO on October 29, 2014 by Mr. Small, and other counsel of record, at the Small Law Group LLP.

126. Mr. Small, and other individuals, at the Small Law Group LLP were counsel of record in the prosecution of the '982 patent. (*See, e.g.*, Ex. J, '982 patent, face).

127. During prosecution of the '982 patent, Mr. Small of the Small Law Group LLP executed and submitted an IDS dated October 21, 2015 identifying the '721 PCT as prior art. (Ex. K, '982 patent October 21, 2015 IDS).

128. The '595 patent was being prosecuted before the USPTO on October 21, 2015 by Mr. Small, and other counsel of record, at the Small Law Group LLP.

129. At least, Mr. Small of the Small Law Group LLP knew of the Spectrum '721 PCT during the prosecution of the '595 patent.

130. Spectrum's '721 PCT was concealed and not cited to the examiner during the prosecution of the '595 patent before the U.S. Patent and Trademark Office.

131. [REDACTED]

[REDACTED] of the '595 patent further illustrates the contributions of, at least, Yoel Zilberstien and Nathaniel Roth as inventors or co-inventors of the '595 patent.

132. While the '595 patent does not claim Spectrum Trade Secret F, the '595 patent specification contains Spectrum Trade Secret F.

133. Because Spectrum Trade Secret F was not disclosed in the '721 PCT, the only way for the GE diligence personnel to have learned of Spectrum Trade Secret F was as a result of Spectrum's disclosure of the same during the diligence process.

134. Spectrum Trade Secret F was invented no later than June 2011 by, at least, Yoel Zilberstien and Nathaniel Roth, and has not been publicly disclosed by Spectrum.

135. Spectrum Trade Secret F was then disclosed to GE diligence personnel during due diligence well before the application that matured into the '595 patent was filed January 29, 2014. Specifically, Trade Secret F was provided to GE during the January 24, 2012 on-site due diligence meeting and in communications continuing through February 2012 in accordance with the protections and obligations of the 2009 Agreement.

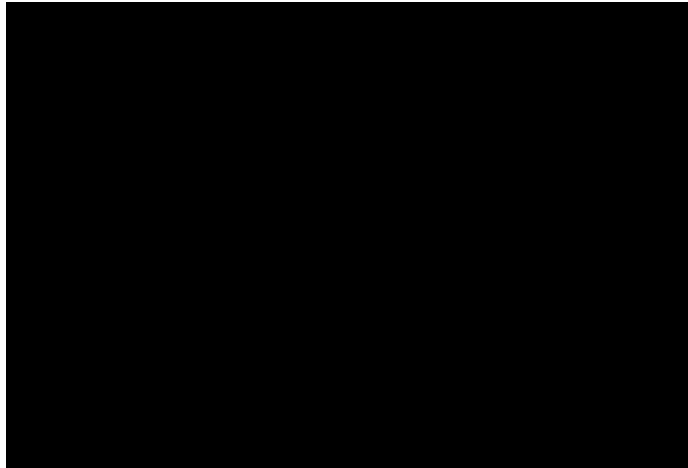
136. The GE diligence personnel attending the meetings and to whom Spectrum Trade Secret F was disclosed, included, at least, Nathan Hermony, Reuven Brener, Arie Eshco, Riyadh Mahameed, and Sergio Steinfeld. Trade Secret F was also disclosed to other GE diligence personnel including Jean-Paul Bouhnik, Osnat Zak, Alexander Ganin, and Floris Jansen.

137. The information disclosed was included in the 2012 Due Diligence presentations, and materials from the data room as well as the February 15, 2012 email to Riyadh Mahameed, of the GE diligence team, from Nathaniel Roth forwarding the updated

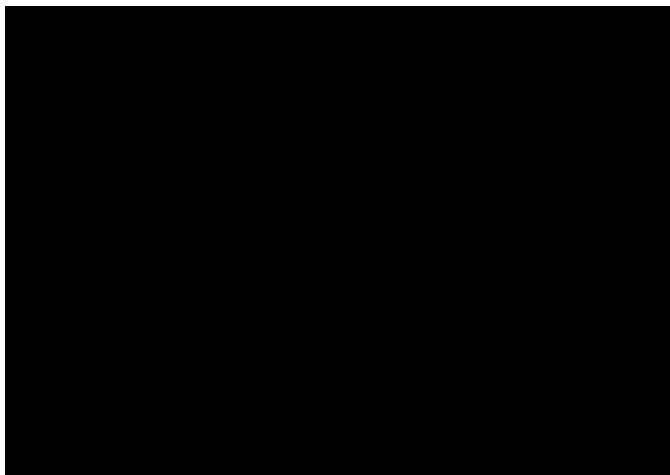
“Jaszczak simulation,” which was a detailed simulation(s) based upon a digital “patient” provided by GE.

138. Spectrum Trade Secret F was developed through Plaintiff-Counterclaimant Spectrum’s careful analysis to be a cost effective configuration while maintaining the effective operation and efficiency of the detector units as well.

139. A sample of the disclosure of this invention to GE is provided in the slide below:



140.



Anticipated/Obvious Over the ‘721 PCT

141. The Spectrum ‘721 PCT is directed to the same field as the ‘595 patent.

142. The ‘595 patent is also directed to the same field as the ‘439 patent.

Specifically, the ‘595 patent states, like the ‘439 patent in the “Background of the Invention” section, that:

The subject matter disclosed herein relates generally to an apparatus and method for diagnostic medical imaging, such as Nuclear Medicine (NM) imaging. In NM imaging, systems with multiple detectors or detector heads may be used to capture an image of a subject, or to scan a region of interest. For example, the detectors may be positioned near the subject to acquire NM data, which is used to generate a three-dimensional (3D) image of the subject.

(Ex. B, ‘595 patent, col. 1, lines 5-14).

143. The Spectrum ‘721 PCT identifies the same “Field of Invention” as follows:

The present invention, in some of its embodiments, relates to apparatus and methods of tomography in the field of nuclear medicine (sometimes referred to herein as “N-M tomography”), and more particularly to N-M tomography systems as a whole, collimated detector configurations for N-M tomography systems, and methods of using NM tomography systems and detectors.

(Ex. F, ‘721 PCT, page 1, lines 4-8)(emphasis added).

144. The Spectrum ‘721 PCT published on November 14, 2013 before the ‘595 patent was filed on January 29, 2014.

145. The Spectrum ‘721 PCT is therefore prior art to the ‘595 patent under at least 35 U.S.C. § 102(a)(2) (AIA).

146. Defendants admit that the ‘721 PCT discloses Spectrum Trade Secret I: Partial use of ring SPECT detectors for improved proximity. (Defendants’ Amended Answer, [D.I. 89] at ¶ 341).

147. The Spectrum ‘721 PCT further discloses devices and methods of employing less than all of the multiple detector heads to improve proximity to the patent for diagnostic medical imaging, such as Nuclear Medicine (NM) imaging.

148. The Spectrum '721 PCT teaches:

It should also be noted that extension of the detector heads to create a smaller bore size generally has the effect of positioning the detector heads closer to the ROI [region of interest], consequently, each detector head subtends a larger solid angle around the ROI, and is able to collect more photons emitted from the ROI. The result is that overall system sensitivity may be improved and/or a smaller number and/or size o[f] detectors may be used. Such approaching is optionally used in PET and/or in non-tomographic imaging modes, such as planar imaging. Positioning the detector heads closer to the ROI may also improve the spatial resolution by decreasing nonlinearity as discussed below."

(Ex. F, '721 PCT, page 27, lines 11-19).

149. The Spectrum '721 PCT further teaches:

To achieve a smaller bore size with detector array 706, only some, for example one-half of, or any subgroup of, the detector heads, for example, detector heads 702b, 702d, and 702f, are extended, as illustrated in Fig. 7B. The other detector heads 702a, 702c, and 702e remain in a fully retracted position. In some embodiments, only the extended detector heads are used. In other embodiments, all the detector heads are used, but the sensitivity and/or resolution of the extended detector heads may be not the same as for the un-extended detector heads. This is optionally accounted for in the course of processing the emission data.

(Ex. F, '721 PCT, page 53, line 27-page 54, line 4).

150. The Spectrum '721 PCT additionally teaches:

Figs. 6A-6D, illustrate spatial resolution improvement that can be achieved when 15 the bore size is increased or decreased to take account of the particular ROI and body location. The example shows a SPECT only system with 12 detector heads 602 on one side of a single-ring circular gentry 600, but the same benefits can be achieved in PET only systems, and in systems capable of both SPECT and PET operation. Fig. 6A shows detector heads 602 in a retracted configuration to provide a large 20 bore, for example, a conventional 90 cm. bore, for performing a full body scan. Fig. 6B illustrates detector heads 602 fully extended to provide a small bore, for example, 20 cm., as it would be used, for example, when performing a brain scan or a scan of the neck. It should be appreciated that the cross-section of an ROI will generally not be circular, particularly in the case of a body scan, so the possibility non-uniform resolution 25 and/or sensitivity may exist.

(Ex. F, '721 PCT, page 49, lines 14-25).

151. Figure 6A of the Spectrum '721 PCT depicts the detector configuration discussed in Paragraph 150 above.

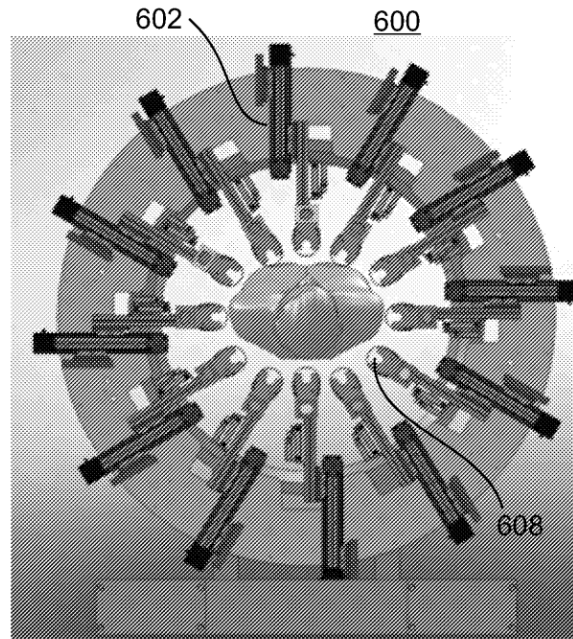


FIG. 6A

152. The asserted claims of the '595 patent all recite "position[ing] an internal group of the plurality of detector units radially inside the ring." (*See, e.g.*, Ex. B, '595 patent, claims 1, 3, 7, 8, 10, 11 and 18).

153. This "internal group" of detectors is a subset of the total 12 detectors, and the use of less than all 12 detectors allows for closer proximity to the region of interest as shown in Figure 5A of the '595 patent below.

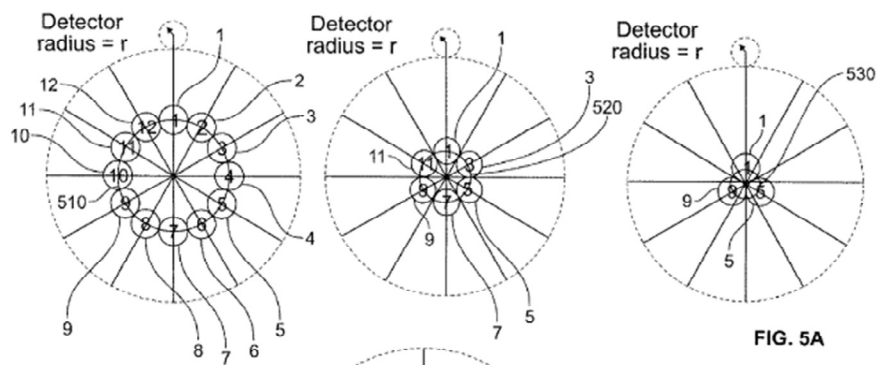


FIG. 5A

154. If the asserted claims of the ‘595 patent are construed as Defendant GE asserts to cover the Spectrum Veriton®, the asserted claims of the ‘595 patent are anticipated and/or rendered obvious by the teachings of the Spectrum ‘721 PCT.

155. The Spectrum ‘721 PCT was not considered by the examiner during prosecution of the ‘595 patent.

156. The fact that Yoel Zilberstien and Nathaniel Roth are the true inventors of the ‘595 patent and that Defendants Hefetz and GE were misappropriating Spectrum’s Trade Secrets were also concealed from the Examiner.

157. Plaintiff-Counterclaimant Spectrum is therefore entitled to Declaratory Judgment that the asserted claims of the ‘595 patent are invalid for at least the reasons stated above.

SIXTH COUNTERCLAIM:
DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE ‘595 PATENT
FOR UNCLEAN HANDS

158. Plaintiff-Counterclaimant Spectrum incorporates by reference, as though fully set forth herein, paragraphs 1-157 of the Spectrum Counterclaims.

159. Defendant Hefetz and Defendant GE have asserted that Defendant Hefetz was not aware of or subject to the 2009 Agreement. (*See* Defendants’ Motion to Dismiss [D.I. 52 and 53]).

160. Upon information and belief, named inventors Avi Bar-Shalev and Gil Kovalski were not subject to and did not execute the 2009 Agreement.

161. Nevertheless, GE diligence personnel, including at least Defendant Steinfeld, disclosed proprietary and/or confidential Spectrum Information, including confidential and proprietary details of the Spectrum Veriton®, protected by the non-use and non-disclosure provisions of the 2009 Agreement to Defendant Hefetz and named inventors Avi Bar-Shalev and Gil Kovalski to prepare the application that matured into the ‘595 patent, which was filed

on January 29, 2014.

162. Taking this improperly provided proprietary and/or confidential Spectrum Information into account, Defendant Hefetz drafted claims that issued in the '595 patent in an attempt to impede Spectrum's development and introduction of the Spectrum Veriton®.

163. Defendants Hefetz and Steinfeld, as well as named inventors Avi Bar-Shalev and Gil Kovalski, further concealed the substantial contribution of, at least, Yoel Zilberstien and Nathaniel Roth as inventors or co-inventors of at least the asserted claims of the '595 patent from the USPTO.

164. Defendants Hefetz and Steinfeld, as well as named inventors Avi Bar-Shalev and Gil Kovalski – on behalf of Defendant GE – performed these improper acts in order to provide Defendant GE an improper business advantage over Spectrum by obtaining a patent to assert against the Spectrum Veriton®.

165. Upon information and belief, Defendant Hefetz also anticipated and expected to personally benefit from this improper business advantage, including obtaining a patent to which he was not entitled, in that Defendant Hefetz would and is now benefiting and receiving remuneration from Defendant GE's assertion of the '595 patent against Spectrum pursuant to the other agreements referenced in the Patent Assignment Documents

166. For at least these reasons and those in Paragraphs 549-559 and 639-660 of the First Amended Complaint [D.I. 37], Plaintiff-Counterclaimant Spectrum is entitled to Declaratory Judgment of unenforceability for unclean hands of, at least, the asserted claims of the '595 patent.

167. Plaintiff-Counterclaimant Spectrum reserves the right to supplement these Spectrum Counterclaims, and/or to assert additional defenses and/or counterclaims that may become known to it, through discovery or otherwise.

168. Plaintiff-Counterclaimant Spectrum hereby demands a trial by jury of all

defenses to the Amended GE Counterclaims, including those raised in the Spectrum Counterclaims.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff-Counterclaimant Spectrum seeks Declaratory Judgment against Defendants GE, Hefetz and Steinfeld, and requests the Court to enter an order:

1. Dismissing in its entirety, with prejudice, Defendant GE's patent infringement counterclaims of the '439 patent and the '595 patent against Plaintiff-Counterclaimant Spectrum;
2. Holding that Defendant GE shall take nothing by GE's patent infringement counterclaims, and that judgment be entered in favor of Plaintiff-Counterclaimant Spectrum;
3. Declaring that Plaintiff-Counterclaimant Spectrum is an owner or co-owner of the '439 patent and the '595 patent.
4. Declaring that Plaintiff-Counterclaimant Spectrum has not, does not, and will not infringe the asserted claims of the '439 patent and the '595 patent;
5. Declaring that Plaintiff-Counterclaimant Spectrum has not, does not, and will not induce and/or engage in contributory infringement of the '439 patent and the '595 patent;
6. Declaring the '439 patent and the '595 patent invalid;
7. Declaring this case exceptional under 35 U.S.C. § 285;
8. Issuing an order enjoining Defendant GE from further improperly asserting the '439 patent and the '595 patent, and from further interfering with Spectrum's business opportunities;
9. Awarding Plaintiff-Counterclaimant Spectrum Costs and Attorney's fees; and
10. Awarding Plaintiff-Counterclaimant Spectrum such other and further relief as the Court may deem just and proper.

Dated: New York, New York
August 5, 2020

Respectfully submitted,

/s/ Lisa A. Cahill

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